

Docket No. 242589US2RD



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Susumu HASHIMOTO, et al.

SERIAL NO: 10/659,299

GAU: 2627

RCE FILED: Herewith

EXAMINER: Julie Anne Watko

FOR: MAGNETORESISTANCE EFFECT ELEMENT, MAGNETIC HEAD, AND MAGNETIC REPRODUCING APPARATUS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s), published application(s) or issued patent(s) which may be related to the present application. In accordance with the waiver of 37 CFR 1.98 dated September 21, 2004, copies of the cited pending applications are not provided. Cited published and/or issued patents, if any, are listed on the attached PTO form 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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Form PTO 1449
(Modified)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.
242589US2RDSERIAL NO.
10/659,299

LIST OF REFERENCES CITED BY APPLICANT

APPLICANT
Susumu HASHIMOTO, et al.RCE FILING DATE
HerewithGROUP
2627

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						
	AM						
	AN						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
					YES	NO
	AO	3,293,437	4-5-02	Japan w/English Abstract		X
	AP					
	AQ					
	AR					
	AS					
	AT					
	AU					
	AV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	Physical Review B, vol. 45 no. 2, pgs 806 - 813, (1-1-1992), Giant magnetoresistance of magnetically soft sandwiches: Dependence on temperature and on layer thicknesses, B. Dieny et al.				
	AX	Japanese Applied Physics, vol 69, pgs 4774 - 4779, (4-15-1991) Magnetotransport properties of magnetically soft spin-valve structures (invited), B. Dieny et al.				
	AY	"Handbook of oxides", Japan-Soviet Press bureau, 1969; This reference is related to a thermo-dynamic parameter for oxides				
	AZ				<input type="checkbox"/> Additional References sheet(s) attached	

Examiner

Date Considered

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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EXAMINER: WATKO, J.

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STATEMENT OF RELEVANCY

Reference AO on form PTO-1449: is related to a magnetorresistive device including a nonmagnetic layer whose thickness is ranged between 2 to 5 nonometer.

Reference AW on form PTO-1449: is related to a giant magnetoresistance of magnetically soft sandwiches and dependence on temperature and on a layer thickness

Reference AY on form PTO-1449: is related to a thermodynamic parameter for oxides.